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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,371	12/15/2000	Franck Barillaud	AUS920000805US1	9807

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EXAMINER

CHEA, PHILIP J

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 08/02/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/738,371

Applicant(s)

BARILLAUD ET AL.

Examiner

Philip J Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/10/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-21 have been examined

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 5/10/01 was filed after the mailing date of the 17th on May, 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description:
 - Note page 6, line 5 "service allocation device 100"; lines 10, 11 "Service allocation device 100", "probe 101", "module 102", and "engine 103".
 - Note page 7, line 13 "module 102"; line 20 "engine 103".
 - Note page 8, lines 18,19 "service allocation device 100".

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

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- Note Fig. 2A, reference numbers 71, 72, and 73.
- Note page 7, lines 11 and 12, references are made to figures 4A, 4B, and 4C, which are not shown in any submitted drawings.

Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Abstract

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because a phrase is used which can be implied. Note line 1, "A network service allocation device is disclosed". Correction is required.

See MPEP § 608.01(b).

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Specification

5. The disclosure is objected to because of the following informalities:

- Note lines 20 and 21 on page 4 and line 28 on page 6, reference made to "clients 61-62". An earlier reference on page 4, line 18 suggested a "server 61".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9-14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "said network" on page 11, lines 7 and 8. There is insufficient antecedent basis for this limitation in the claim.

Other claims not mentioned are rejected by virtue of being dependent on a rejected claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 5-13, 15-19, and 21 rejected under 35 U.S.C. 102(b) as being anticipated by Liron (U.S. 5,598,532).

7-1 As per claims 1, 13, 15, and 21, Liron discloses a method for allocating a service on a network (column 6, lines 60-63), as claimed, comprising:

- collecting a set of performance data representative of a set of physical characteristics of the network (columns 4 and 5, lines 35-37 and lines 14-15 respectively);
- identifying nodes in response to performance data (column 5, lines 29-36); and
- correlating node clusters and performance rule (column 9, lines 29-32).

While not specifically stated, it is inherent that optimizing the location of a shared central resource is for purposes of allocating a service to its clients (column 6, lines 60-63).

Figure 1, reference (16) shows the identification of node clusters.

7-2 As per claim 2, Liron discloses providing a map of clusters relating to the performance rule (column 11, lines 62-64). SST is a sorted score table based on a specified performance test, and is essentially a map of the clusters according to their performance standings.

7-3 As per claim 3, Liron discloses allocating service to the first cluster (column 5, lines 61-63). By selecting a shared central resource, Liron is essentially describing providing a service, which is inherent with the shared central resource, to a node cluster (16) in network (11) of figure 1.

7-4 As per claim 4, Liron discloses providing a listing including at least one server within the first cluster for supporting the service (column 8, lines 37-47). The table is a listing providing the first entry as the cluster where the service should be located.

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7-5 As per claim 5, Liron discloses allocating the service to the first server (column 5, lines 60-67 through column 6, lines 1 and 2). Liron suggests a database application as a service running on an optimized node cluster.

7-6 As per claims 6, 10, and 17, Liron discloses probing the network for a round trip time (column 6, lines 42-44). In order minimize the delay time, the round trip time is inherent within that calculation.

7-7 As per claims 7, 11, and 18, Liron discloses probing the network for a hop count (column 3, lines 37-43).

7-8 As per claims 8, 12, and 19, Liron discloses probing the network for bottleneck link speed (column 6, lines 54-57). In order to minimize the link bandwidth, the link speed is inherent in that calculation.

7-9 As per claims 9 and 16, Liron discloses a distributed computer system, as claimed, comprising:

- interconnected nodes (column 4, lines 22-24);
- a server to allocate a service (column 5, lines 40-46);
- a server probe for providing performance data as related to a set of physical characteristics of the network (column 5, lines 14-15);
- a server module to identify node clusters (column 5, lines 29-33); and
- a server engine to use a performance rule and cluster data (column 5, lines 33-35).

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Liron as applied to claims 9 and 16 above, and further in view of Johnson (U.S. 6,078,946). Although Liron discloses substantial features of the claimed invention (discussed above), he fails to directly disclose the module being a neural network. However, these features are well known in the art and would have been an obvious modification of the system disclosed by Liron, as evidenced by Johnson.

In an analogous art, Johnson discloses a network management system, which uses a neural network module for optimizing resources (column 5, lines 41-46).

Given the teaching of Johnson, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Liron by employing a neural network module, such as disclosed by Johnson, in order to gain the best results available for a set of input data (column 3, lines 19-23).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- de la Salle (U.S. 5,878,420)
- Moiin et al. (U.S. F,999,712)
- Drysdale et al. (U.S. 6,058,102)

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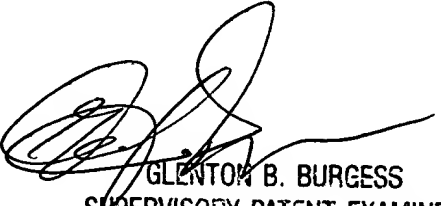
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Chea whose telephone number is 703-605-1202. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip J Chea
Examiner
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PJC



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